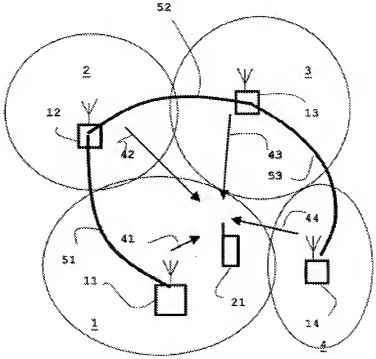
REMARKS

Claims 1-75 were rejected under 35 U.S.C. §102(e) as being anticipated by Fattouch, U.S. Publication No. 2003/0078051. Respectfully, this rejection is traversed.

Fattouch describes a method for determining the planning of a schedule of network frequencies that are to be allocated to a plurality of wireless network base stations 11, 12, 13 and 14, each of which manage a distinct "cell" 1, 2, 3 and 4, as indicated below:



In particular, and as described at [0002], a "wireless cell network … includes a plurality of ground radio base stations which are connected to each other through the wired telephone network and which can be accessed by mobile terminals when the mobile terminals are situated within the radio cell of one station." A representative mobile terminal is the device 21 shown above. Mr. Fattouch goes on to say at [0005] that "to set up the wireless network, the operator can control a range of frequencies allocated to him and constituting a precious resource. Within said range this operator regularly distributes carrier frequencies, or transmission channels, the frequency gap separating two carriers [being] large enough that inter-channel interference – in the light of receiver sensitivities – remains below a specific threshold of good operation." A prior art algorithm for accomplishing this is recited at paragraph [0007], and the inventor then

describes (at [0011] deficiencies in this algorithm. To that end, the patent application then goes on to describe an enhancement to that previously-known algorithm, beginning at paragraph [0015]. The enhancement algorithm begins by selecting a cell, (for that cell) estimating interfering signal strength at various frequencies imparted by other cells within range, allocating to that cell a frequency associated with minimal interference, and, thereafter, picking additional cells to progressively develop a chain of downstream cells (repeating the above steps for each of them). According to Fattouch, the allocation step involves a number of sub-steps: a user-selected interference threshold between arbitrary cells is compared to a system-derived estimated interference level, a subset of the cells (associated with an interfering signal strength below the threshold) are eliminated to leave a remaining subset of cells, and then the frequencies are allocated to the remaining subset of cells according to the specific functions recited in paragraphs [0024-0025]. This technique is said to provide an "optimal schedule[] for allocating a given number of frequencies to [the] plurality of base stations." [0030].

While the Fattouch algorithm refers to "scheduling" and "interference," the application is not directed to "systems and methods which implement communication scheduling to reduce service level variance associated with interference", as described at page 4, paragraph [0012] of the written description. As the very next sentence states, "[i]nterference metrics are preferably collected in real time for use in scheduling decisions." More importantly, the claim (claim 1 being representative) then goes on to recite what entities are being scheduled according to the subject disclosure: "scheduling ... communications between said wireless communication node and said plurality of client nodes." In other words, what is being scheduled in the present invention are a set of communications, namely, a first communication between a first client node and a wireless communication node, a second communication between a second client node and the wireless communication node, and so on. In the claim, there are thus "a plurality of client nodes" (wireless devices) that each need to be scheduled relative to a single "wireless communication node." In Fattouch, and in contrast, each base station can be thought of as a "wireless communication node" and the inventor there is merely describing a technique for allocating frequencies across such multiple "wireless communication nodes" (the base stations). The Fattouch reference does not disclose or suggest any technique for scheduling the individual mobile devices relative to a particular node.

Further, the Fattouch does not describe any technique for measuring interference, and the inventor there is described interference between "communication nodes." Fattouch does not appear to disclose or suggest measuring the interference on a first link (between a first client and a given communication node) and then measuring the interference on a second link (between a second client and the same communication node.

Of course, because Fattouch is concerned with the base stations and not the wireless devices themselves (the "plurality of client nodes"), the reference does not (and cannot) address the claim requirement (see claim 1) of "scheduling ... to reduce service level variability between said plurality of client nodes." Indeed, that goal of the subject disclosure is completely unrelated to the Fattouch algorithm, which simply allocates interfering frequencies to base stations.

The Manual of Patent Examining Procedure (MPEP) § 2131 provides that a "claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described in a single prior art reference." While it is true the literal correspondence of the wording need not be shown, the "identical invention must be shown in as complete detail as contained in the ... claim." Fattouch does not meet this rigid requirement because the reference does not disclose at least the following functions as recited in claim 1 (emphasis supplied):

"measuring, in real-time, interference metrics associated with links between a wireless communication node and a plurality of client nodes; and

"scheduling, based at least in part on said [real-time measured] interference metrics, communications between said wireless communication node and said plurality of client nodes to reduce service level variability between said plurality of client nodes."

Thus, claim 1 is not anticipated by the reference.

Independent claim 29, among other subject matter absent from the reference, also includes at least the following subject matter:

"scheduling downlink communications ... using said interference metrics to provide high bandwidth throughput while reducing service level variability between said plurality of wireless communication links."

Independent claim 45 is not anticipated either, as the "scheduler" functionality (i.e.., "to schedule communications via ones of said plurality of communication links to minimize variance

of communication service levels associated with said plurality of communication links.") is not disclosed or suggested by the reference.

Independent claim 52 also is not anticipated by Fattouch, as (among other differences) the system there does not perform the step of "determining link quality metrics with respect to links between a wireless communication node and a plurality of client nodes." Rather, Fattouch merely allocates frequencies among wireless base stations.

The dependent claims are not anticipated either, for the reasons advanced with respect to the independent claims.

Accordingly, the anticipation rejection of claims 1-75 is incorrect and should be withdrawn.

For the above reasons, reconsideration and favorable action are respectfully requested.

Respectfully submitted,

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